FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

Atty. Docket No.: C382.12-0146	Serial No.: 10/783,682
Applicant: Harvey A. Restaino et al.	
Filing Date: February 20, 2004	Group Art: 2838

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
SB	AA	2,514,745	7/11/50	Dalzell	171	95	
	AB	3,593,099	7/13/71	Scholl	320	13	
	AC	3,607,673	9/21/71	Seyl	204	1	
	AD	3,676,770	7/11/72	Sharaf et al.	324	29.5	
	AE	3,729,989	5/1/73	Little	73	133	
	AF	3,753,094	8/14/73	Furuishi et al.	324	29.5	
	AG	3,808,522	4/30/74	Sharaf	324	29.5	
	AH	3,811,089	5/14/74	Strezelewicz	324	170	
	AI	3,873,911	3/25/75	Champlin	324	29.5	
	AJ	3,886,443	5/27/75	Miyakawa et al.	324	29.5	
	AK	3,889,248	6/10/75	Ritter	340	249	
SB	AL	3,906,329	9/16/75	Bader	320	44	

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
SB	AM	59-17892	1/30/84	Japan			Abstract Only
	~~AN~~	~~59-17893~~	~~1/30/84~~	~~Japan~~			~~Abstract Only~~
	~~AO~~	~~59-17894~~	~~1/30/84~~	~~Japan~~			Abstract Only

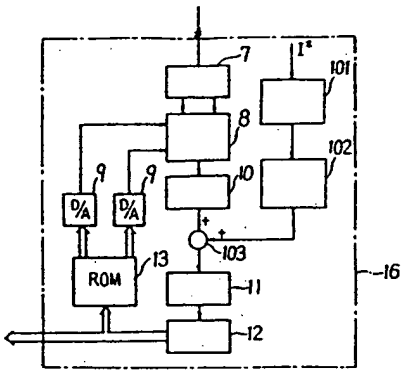
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

SB	AP	"Electrochemical Impedance Spectroscopy in Battery Development and Testing", Batteries International, April 1997, pgs. 59 and 62-63.
SB	AQ	"Battery Impedance", by E. Willihnganz et al., Electrical Engineering, September 1959, pgs. 922-925.
SB	AR	"Determining The End of Battery Life", by S. DeBardelaben, IEEE, 1986, pgs. 365-368.
SB	AS	"A Look at the Impedance of a Cell", by S. Debardelaben, IEEE, 1988, pgs. 394-397.

EXAMINER: SB DATE CONSIDERED: 06/29/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

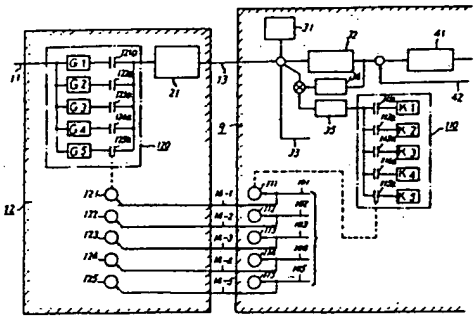
(54) PHASE DETECTOR FOR COMMUTATORLESS MOTOR
(11) 59-17892 (A) (43) 30.1.1984 (19) JP
(21) Appl. No. 57-127285 (22) 21.7.1982
(71) TOKYO SHIBAURA DENKI K.K. (72) KIHEI NAKAJIMA
(51) Int. Cl³. H02P6/00



PURPOSE: To gain stable commutation in a commutatorless motor by calculating the phase variation due to armature reaction from an armature current reference value or an actual armature current value, adding them to a phase deviation to compare continuously in phase.

CONSTITUTION: An armature reaction arithmetic circuit 102 calculates the phase variation component of the motor voltage from the current value applied from a current value arithmetic circut 101 which calculates the actual current value by the current reference value I* from a speed controller, not shown. This calculated output and the phase deviation output obtained through a motor voltage detector, a 3-phase/2-phase converter 7, a phase difference calculating circuit 8 and a deviation amplifier 10 are added by an adder 103, and inputted to a V/F converter 11. The analog signal from the converter 11 is converted to the phase θ of digital amount by the counter 12, inputted to an ROM13 and an effective commutation leading angle setter, not shown, and the sinusoidal signal corresponding to the phase θ outputted from the ROM13 is inputted through a D/A converter 9 into the phase difference calculating circuit 8.

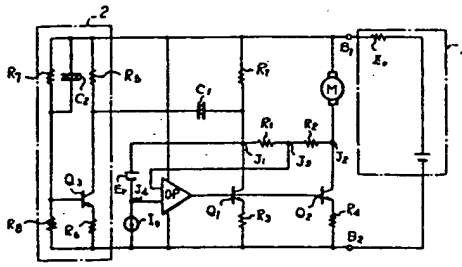
(54) CONTROL DEVICE FOR MOTOR
(11) 59-17893 (A) (43) 30.1.1984 (19) JP
(21) Appl. No. 57-126575 (22) 16.7.1982
(71) MITSUBISHI DENKI K.K. (72) YASUO MEDE(3)
(51) Int. Cl³. H02P7/00,B21B37/02



PURPOSE: To suppress the abrupt variation in the speed of a motor by varying the gain of drooping characteristic smoothly in time series.

CONSTITUTION: An automatic plate thickness controller 12 outputs a control signal 13 in response to the plate thickness deviation signal 11, and a power source 9 controls the current of the motor in response to the control signal 13. Relays 111~115 are operated by signals 101~105 in response to the operating conditions in the power source 9, the gain of a gain altering circuit 110 is selected by the contacts of the relays to select the prescribed drooping characteristic. On the other hand, in the controller 12, the relays 121~125 are operated by the signals 101~105, and the gain of a gain altering circuit 120 is altered by the contacts of the relay. A primary delay circuit is provided at the output side of the gain altering circuit 110, and the abrupt variation in the speed is prevented when the gain of the drooping characteristic is varied.

(54) CONTROL DEVICE FOR PROPORTIONAL CURRENT CONTROL TYPE DC MOTOR
(11) 59-17894 (A) (43) 30.1.1984 (19) JP
(21) Appl. No. 57-125472 (22) 19.7.1982
(71) PIONEER K.K. (72) KAZUNORI ISHIZUKA
(51) Int. Cl³. H02P7/28



PURPOSE: To suppress the ripple component for a power source by superposing the ripple component of the power source inverted in phase on the voltage drop due to proportional resistor.

CONSTITUTION: An inverting amplifier 2 inverts the phase, amplifies and outputs the ripple components produced at the power supply terminal B_1 due to the internal impedance Z_0 of a DC power source 1 and the load variation in the DC motor M. This output voltage is supplied through an AC coupling capacitor C_1 to the terminal J_1 of a proportional resistor R_T. An operational amplifier OP controls transistors Q_1, Q_2 in response to the deviation between the potential difference between the terminals J_1 and J_2 varying in response to the variation in the load of the DC motor and a reference voltage. In this manner, the ripple voltage capable of being produced on power supply terminal B_1 can be sufficiently suppressed.